

# Faunal Remains from Four Late Prehistoric Sites in Northeastern Ohio

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*Introduction*—Abundant faunal remains have been recovered from four Late Prehistoric "Whittlesey Focus" sites in Cuyahoga and Lake counties, Ohio. Excavations at these sites were sponsored by the Cleveland Museum of Natural History during 1967 and 1968. The Fairport Harbor, Reeve, and South Park sites had been previously investigated by Greenman (1935, 1937) and Morgan and Ellis (1943), so that faunal lists from these sites are already available. The additional faunal data from these sites are presented here because the relative abundance of various food sources permits speculation on variations in the economic patterns prevalent at the different sites.

The major component at the South Park site is place in the late Whittlesey Phase (*circa* A.D. 1400 to 1500); although the main Lyman component (Murphy 1971a) is believed to be contemporaneous with the late South Park component, it is not included in the Whittlesey Phase. Its relationships lie to the east, with sites currently incorporated in the Monongahela Complex of western Pennsylvania, sites which may be segregated as the McFate Phase (Johnson 1972). The Fairport Harbor and Reeve sites in Lake County, Ohio, are believed to date around A.D. 1200-1300, the Fairport site perhaps being about 100 years earlier than the Reeve site. The two sites are very closely related, to judge from ceramics and other artifact material. They may represent an earlier phase antecedent to the Whittlesey Phase, for a few diagnostic Reeve Horizontal sherds occur at South Park.

Only at South Park were distinct features (refuse pits) noted, and here the faunal material is presented for each feature. At the other three sites all refuse material was recovered from an unstratified surface midden which varied in depth from less than 6 inches at Lyman to more than 18 inches at Reeve. The Fairport Harbor (Murphy 1971b) and Reeve sites are located on a bank or bluff overlooking a major tributary of Lake Erie, within a mile of the lake shore. The South Park site is on a high promontory near the west edge of the Cuyahoga River valley, over 1/4 mile from the river. The Lyman site lies on a similar promontory at the confluence of Paine Creek and the Grand River, 4 miles east of Painesville. Morgan and Ellis (1943) report a stockade pattern at Fairport Harbor, and there was a semicircular embankment and

stockade at the Reeve site. A double-walled earthwork may still be seen at the Lyman site, though it is only doubtfully associated with the Late Prehistoric component. There is no evidence of a stockade or earthwork at South Park, though one informant maintains that there once was.

The size of the refuse sample recovered varied from site to site, due partly to the amount of work performed at each site and to the relative abundance of faunal remains. Other factors include the shallowness of the acid forest soil at the Lyman site and the present unavailability of part of the South Park sample and all of the Reeve sample. The Reeve site, which yielded the largest quantity of faunal remains, displays an unusually low number of species (23) because the forty-odd boxes of bone material excavated for the museum are not available for study. Material recovered from one 10-by-10 foot square at Reeve, excavated by Greg and Gary Waselkov of Eastlake, has been available. At Fairport Harbor, ten similar excavation units yielded only five times as much bone material as this single square at the Reeve site, giving some idea of the profusion of bone debris at Reeve. The greatest species diversity (37) occurred at Fairport, which also yielded the largest sample analyzed.

Data on the faunal remains from these four sites are presented in the tables at the end of this report. The small amount of identified bone from Fairport Harbor (Table 1) is due primarily to the large proportion of fragmentary bone elements, particularly unidentifiable fish bones.

Estimates of the number of individuals represented in each sample were not made. In most cases the disturbed, heterogeneous nature of the midden suggested that estimates of the number of individuals would prove of little significance in analysis. This procedure is regretted but cannot now be rectified without reanalysis of the samples. In the case of South Park, where much of the bone refuse was confined to discrete features, estimates of the number of individuals might very well be of considerable significance, but circumstances have prevented a complete and more detailed study of the South Park sample.

*Lyman Site.* Bone refuse from the Lyman or Indian Point site is presented in Table 2 by each 10-by-10 foot excavation unit. Greenman (n.d.) has suggested that the site was primarily a hunting

camp, though this suggestion can probably be dismissed on the basis of the available faunal evidence. Of the Lyman sample, 86% of the identified mammal bone is deer and elk; only 4% of the total sample represents fish, and about 10% bird. Shellfish (Murphy 1971c) were fairly common, considering the acid nature of the soil, and a few hickory and walnut shell fragments were found in units A-3 and B-2.

Butchering marks were noted on several bones, including deer stylo-hyoid, scapula, astragalus, and tibia, and raccoon ulna. A single deer toe bone exhibited score marks on the proximal end. An *Ictalurus* (catfish) spine showed use as an awl. No other examples have been noted at any of the other sites, though *Ictalurus* spines are common at all of them. Bone artifacts were limited to beads, awls, antler arrow points and flakers, and a cut deer phalange. A single shell disc bead was the only shell artifact recovered.

Presence of the shellfish renders it unlikely that the site was inhabited only during the winter, as does the relatively large amount of fish remains. Although ice-fishing cannot be discounted, it is unlikely in a stream as small and shallow as the Grand River. The rather common occurrence of deer antler and bear remains also militates against interpretation of the site as a winter hunting camp.

One complicating factor at the Lyman site is the presence of several distinct components, for living patterns may well have changed from one component to the next. All of the faunal remains are assumed to belong to the most recent Late Prehistoric component, and there is no indication that this Late Prehistoric component did not occupy the site year round. The abundance of pottery sherds further suggests that the site was not merely a winter camp. Although no evidence of maize or other cultigens was recovered, it is believed that the absence of corn is fortuitous; quite probably the inhabitants of the site—estimated at not more than two or three dozen, to judge from the limited area over which the cultural debris occurs—relied upon a focal economy with agriculture and game hunting predominant, with fishing and shellfish collecting being subsidiary occupations.

**Fairport Harbor Site.** A list of the identified faunal remains from the Fairport site is given in Table 3. A breakdown of the material by excavation unit is not given, but care was taken during analysis to note any significant distribution of the various remains throughout the site; none was detected. Although bone refuse was abundant at the Fairport Harbor site, a total of 23,958 mammal bones or bone fragments being recovered, only a relatively small percentage (13.7%) could be identified. The very fragmentary nature of much of the material saved by the quarter-inch mesh screen accounts for the small percentage of identified items.

Identification was limited for the most part to skull and jaw fragments, limb bones, and various readily-identifiable elements such as the calcaneum, sacrum, and atlas. Identification of bird and fish bone was particularly troublesome because of the lack of comparative material available at the Museum.

Percentage abundance, based upon the total number of bones and bone fragments is given in Table 1, along with percentages based upon the number of identifiable bones. The percentages are considerably different, largely as a result of the relatively small number of identifiable bird and fish elements in comparison to the large number of unidentifiable bones and fragments in these two classes.

The quantity of identified mammal bone in the present collection is slightly smaller than that described by Robert Goslin in Morgan and Ellis' (1943) report. All but two of the species reported by Goslin are in the Museum collection, the exceptions being the cougar, represented in Goslin's collection by a single bone, and the opossum, represented in Goslin's collection by three bones. The Museum collection contains remains of several rodents not reported by Goslin—*Mephitis mephitis* (skunk), *Microtus pinetorum* (pine vole), *Blarina brevicauda* (short-tailed shrew), *Scalopus* sp., and *Peromyscus* sp. None of these need have been contemporaneous with the aboriginal occupation of the site, however, for the site has long been in a grassy, pasture-like condition, after having been used as a town dump for many years. Presence of many of the smaller, verminous mammals may post-date the Indian occupation, so that their presence is of little significance.

This possibility is particularly critical in the case of the opossum, for Cleland (1966) has emphasized Morgan and Ellis' reference to opossum remains at the Fairport Harbor site. Here at the northeastern-most extreme of its prehistoric range, the presence of *Didelphis*, Cleland suggests, is an indication that the Fairport site was occupied during the somewhat warmer "Neo-Atlantic" period, believed to range from A.D. 800-1200. To support this contention, Cleland notes the absence of *Didelphis* from both earlier and later Late Prehistoric "Whittlesey" components, considering this absence of the opossum as due to an earlier cooler climate and a later return to cooler conditions following the "Neo-Atlantic" period. The rarity of opossum remains at Fairport and the heterogeneous nature of the midden renders this evidence equivocal at best. Furthermore, the opossum does occur at later Late Prehistoric sites (South Park, Table 4), albeit from surface midden (as at Fairport). While I firmly believe that Fitting (1964) was correct in suggesting an early, circa A.D. 1200 date for the Fairport occupation, the presence of the opossum

at the site cannot serve as "proof" for this date.

As for the mammal bones known to be contemporaneous with the aboriginal occupation, few exhibited butchering score marks. These markings were noted only on elk and deer astragali and on the humeri and mandibles of deer.

Remarkably few deer mandibles were recovered. Of these, two had the anterior portion bearing the incisors removed. Four were found in the same unit (9-A), although two of them belonged to the same individual. The six individuals represented by the recovered mandibles have been age-graded on the basis of dentition and tooth wear (Severinghaus 1949) as follows: 7-9 months, 1 specimen; 2-1/2 years, 1 specimen; 3-1/2 years, 1 specimen; 4-1/2 years, 1 specimen; 5-1/2 years, 2 specimens. Such limited sample tells little about the hunting patterns followed at the site. The absence of more deer mandibles in itself may be of some minor significance, suggesting that the mandibles were extensively used for implements which were lost or discarded away from the site. Skull fragments were not particularly uncommon at Fairport, so that it is doubtful that the head was discarded before bringing the deer carcass to the site.

Bird bones were common at the site, but very few could be identified. Only about a third of the species listed by Goslin were identified in the 1967 collection. It should be noted, though, that over two-thirds of the species identified by Goslin were represented by only one or two bones. New records for the site are *Aythya valisineria* (canvasback) and *A. marila* (American scaup). Both are common in the area today. As at all four sites studied, turkey is by far the most common bird represented.

Nearly half of the large number of identifiable fish bones belong to catfish, most of these probably representing the channel cat, *Ictalurus punctatus*. White bass, various suckers, and gar pike were also common. Well-preserved pharyngeal elements of the river herring permit verification of that species at the site, as Goslin suggested. The presence of both bone fish hooks and stone net sinkers indicates that at least two methods were used to catch fish; spearing was probably used, too, though no trace of harpoons or toggles was found.

Turtle shell was extremely rare in the 1967 excavations and appears to be uncommon at all four sites, only box turtle being represented, though Goslin reports both the box and snapping turtle from Fairport Harbor.

When only the mammal bones from the Fairport site are considered, several interesting features are noticeable. In striking contrast with the other sites studied, deer and elk here provided a relatively small percentage of the animals killed (53.6% of the identified mammal bone). A diffuse or at least "mixed agricultural" food economy is

suggested by the rather heavy reliance upon a wide variety of small game, particularly the raccoon (18.3%), squirrel (8.8%), and beaver (5.3%). Bear (6.2%) was also important. Thus, while there is an obvious reliance upon mammals associated with an aquatic or riverine environment, the inhabitants of the site also utilized open forest (deer, elk) and mature, "deep" forest (bear) environments. The comparatively high species diversity at this site ( $N = 37$ ) may be due simply to the large sample size, but there may also be a slight "edge effect" created by the contiguity of the dissimilar ecologies of the Lake Plain and the Portage Escarpment.

A comparable effect would be expected at the Reeve site, but it may not be evident because of the relatively small size of the collection available from Reeve. At that site there is a similar lack of emphasis upon deer (57.7%), but elk is somewhat more important (14.7%) than at Fairport.

The most obvious contrast is that between Fairport and South Park, where maize agriculture is believed to have been considerably more important. At South Park, 70.5% of the identified mammal bone was deer, the next most abundant species being raccoon, representing only 3.4% of the mammalian fauna. Elk, bear, and beaver each comprised only 2-2.5% of the South Park sample. These proportions are strong evidence of a more focal settlement pattern, probably induced by a greater reliance upon maize horticulture. The more diffuse or mixed agricultural economy indicated by the importance of a variety of small game and the larger mammals at Reeve and Fairport Harbor, also indicated by the greater use of fish at those two sites, suggests that corn was of less importance in the Fairport and Reeve communities than it was at South Park.

*Reeve Site.* The small Reeve sample made available to me by the Waselkov brothers was excavated from a single 10-by-10 foot square. It may be too small to be a truly representative sample. If the large collection retrieved from this site during the 1968 excavations is preserved and eventually studied, a more accurate appraisal of the Reeve economy may be attained.

The available sample is similar to that from Fairport in having a relatively high percentage of fish (16.5%) and a low percentage of deer (57.7% of total identified mammal bone). The apparently high proportion of elk (14.7% of total identified mammal bone) is probably misleading, for the bulk of the sample very likely came from the same individual. Raccoon was extensively used at Reeve (8.0% of the identified mammal bone), though it is less abundant than at Fairport.

Fish and aquatic-oriented mammals such as beaver and raccoon are less in evidence at Reeve than at Fairport. The concentration on deer and

elk, at the expense of these and other small mammals, may indicate a less diffuse economy at Reeve, due perhaps to a greater dependence upon maize. This contrast is even more evident if the faunal tabulation presented by Morgan and Ellis (1943) is used. The considerable divergence between percentages derived from Morgan and Ellis' Fairport data and my own suggests that minor differences in abundance between sites are unlikely to serve as an accurate indication of real differences in the faunal composition.

**South Park Site.** Making allowances for the considerable difference in sample size, the South Park and Lyman faunal collections are very similar. This situation might be expected from the presumed contemporaneity of the sites and their comparable geographic location. Both sites lie on high promontories near good-sized streams in deciduous forest, well away from the Lake Plain.

The South Park fauna indicates a focal economy based primarily upon maize agriculture and deer hunting. Elk, beaver, bear, and squirrel, each of which provided more than 5% of the Fairport mammal fauna, are sparsely represented at South Park. As noted above, the second most common mammal at South Park (raccoon) forms only 3.4% of the total number of identified mammal bones. This condition is remarkably similar to the situation at Lyman, where the second most common mammal (elk) formed only 3.7% of the identified mammal bones, followed by raccoon (2.6%) and bear (1.9%).

Butchering marks seem to be somewhat more frequent at South Park than at the other sites. Cut marks were noted on four elk astragali and an elk metatarsal, on a bear humerus, and on three deer calcanea, a deer scapula, and a deer tibia.

The seven deer mandibles that could be age-graded were distributed as follows: 1 week, 1 specimen; 3-4 months, 1 specimen; 4-6 months, 2 specimens; 2-1/2 years, 1 specimen; 4-1/2 years, 1 specimen; 5-1/2 years, 1 specimen. Again this sample is too small to permit any valid conclusions about hunting practices, but there does seem to be an indication of selection, with emphasis upon the younger animals. If a larger sample were to display such selectivity, or a bimodality due to selection of both very young and very old individuals, it could be interpreted as evidence of stalking, suggestive in turn that deer hunting was not the major food source for the natives. Such a pattern (Cleland 1966) can be inferred to be the result of utilizing a focal agricultural economy that centers around maize horticulture.

If total mammal/fish/bird percentages are compared to those from a typical Fort Ancient site such as Blain (Prufer and Shane 1970), there is a noteworthy similarity between the two sites. The Blain economy has been interpreted as a focal adapta-

tion to maize horticulture, supplemented by the stalking of deer and the hunting of smaller game. Shane (in Prufer and Shane 1970) had a sufficiently large sample of deer mandibles to conclude that young and extremely old individuals were preferentially selected, a strong indication that stalking was the mode of hunting and that hunting was a seasonal, supplementary activity. At the Blain site deer formed 77.8% of the mammalian sample. Raccoon and squirrel were the next most common mammals, forming only 2.9% and 2.7% of the total of identified mammal bones (elk was close behind, with 2.6%).

South Park, Lyman, and Blain also share a relatively high percentage of bird remains, though fish and turtle seem to have played a larger part in the diet of the Blain people than at South Park and Lyman. This latter difference may be partly due to the proximity of a major river, the Scioto, to the Blain site; the Cuyahoga, though undoubtedly utilized by the inhabitants of South Park, lies at least 1/4 mile from the site. Turtle, however, seems to be genuinely scarce and little utilized at all known "Whittlesey" sites, even at Reeve and Fairport, where fish remains are considerably more abundant than at Blain.

The rather close similarity of the South Park and Lyman samples makes it tempting to suggest that the Lyman site represents a component with a focal economy centering around maize agriculture. The absence of maize in the Lyman collections does not in itself preclude this possibility, while the specialized hunting economy evidenced at Lyman and South Park suggests that hunting played a secondary role at both sites.

It should be noted that Greenman's (1937) faunal list for the South Park site includes two species not represented in the Museum's 1968 collection. There are the muskrat and the panther. Of considerably more interest is the generally overlooked reference (Bole and Moulthrop 1942) to the presence of *Taxidea taxus* (badger) at the South Park site. Though represented by only two bones, this identification is unquestionable and represents the easternmost known occurrence of the badger. Cleland (1966) notes only two occurrences of the badger in Ohio aboriginal sites, both in the southwestern part of the state. It is extremely doubtful that the South Park situation actually indicates the former existence of prairie conditions along the Cuyahoga, but the occurrence is nonetheless interesting.

**Conclusions.** Maize horticulture is believed to have played an important role in the food economy at all four sites studied. Though the remains of corn were abundant only at the South Park site, this condition may be due largely to the absence of refuse pits at the other sites. It is likely that maize was less important at Reeve and Fairport (where,



incidentally, refuse or storage pits are absent and corn remains are rare); study of the faunal remains from these sites supports this contention, indicating a more diffuse, "mixed agricultural" economy at Fairport and Reeve, one which incorporated fishing considerably and relied heavily upon a variety of large and small game.

A slight "edge effect" may be postulated to explain the comparatively large species diversity at Fairport, though this diversity may be due simply to the large size of the sample obtained from the Fairport excavations.

The Late Prehistoric occupation at the Lyman site probably does not represent a winter hunting camp but a permanently-occupied settlement composed of only two or three family-sized units which practiced a focal agricultural economy based upon maize. This maize agriculture is inferred from the heavy reliance upon deer, the lack of emphasis upon other large game and small mammals, and the general similarity of the faunal remains to those

from South Park, a site where abundant preserved maize substantiates the importance of agriculture.

South Park represents an excellent example of a focal agricultural economy, comparable to typical Fort Ancient sites in southern Ohio. An emphasis upon fish, water-oriented mammals, and small game in general—characteristic of the Fairport and Reeve faunal assemblages—is lacking at South Park, though such sources were utilized to some extent.

These contrasts between South Park and Lyman on the one hand and Reeve and Fairport on the other can be explained as being due to 1) the proximity of Reeve and Fairport Harbor to Lake Erie and the Lake Plain, and 2) the lesser importance of maize to the inhabitants of these two sites. The second factor may in turn be a reflection of the somewhat earlier date postulated for the occupation of Reeve and Fairport, though maize horticulture was already an important constituent of Late Prehistoric cultures to the north and east, in Ontario and New York.

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Table 1:  
Comparison of Faunal Remains  
from Four Northeastern Ohio Sites

	Identified Mammal		Identified Bird		Identified Fish	
	Number	%	Number	%	Number	%
Fairport Harbor	3244	80.8	48	1.1	727	18.1
Reeve	2779	91.9	38	1.3	204	6.8
Lyman	574	97.3	12	2.0	4	0.7
South Park	1381	92.3	64	4.3	51	3.4
	Total Mammal		Total Bird		Total Fish	
	Number	%	Number	%	Number	%
Fairport Harbor	23958	63.8	2797	7.4	10818	28.8
Reeve	5283	75.3	576	8.2	1155	16.5
Lyman	574	86.3	63	9.5	28	4.2
South Park	4331	80.9	809	15.1	207	4.0
	Mammal		Species Diversity Bird		Fish	Total
	Number	%	Number	%	Number	Number
Fairport Harbor	22		5		9	36
Reeve	14		2		6	22
Lyman	12		2		4	18
South Park	17		2		7	26

Table 2:  
Bone Refuse, Lyman Site

	A-1	A-2	B-2	B-3	C-1	C-2	C-3	C-4	I-3	I-4
Fish:										
Catastomid sp.									1	
<i>Ictalurus</i> sp.					1					
<i>Stizostedion</i> sp.						1				
<i>Aplodinotus grunniens</i>			1							
Unidentified	4	2	11		1	4			2	
Reptile:										
<i>Terrapene carolina</i>				2						
Bird:										
<i>Meleagris gallopavo</i>		1	3	2		4			1	
<i>Branta canadensis</i>									1	
Unidentified	8	4	11	1	6	11	10			
Mammals:										
<i>Sylvilagus floridanus</i>	1		1			1	1			
<i>Marmota monax</i>			2	1	1				1	
<i>Sciurus carolinensis</i>	2	1	6	1	1	6	2		6	
<i>Castor canadensis</i>		1	1				1		1	
<i>Ondatra zibethica</i>		1					1		1	
<i>Canis</i> sp.		1		2						
<i>Urocyon cinereoargenteus</i>									1	
<i>Ursus americanus</i>	1				1	2	1		5	1
<i>Procyon lotor</i>	3	1	4		1	3	1		2	
<i>Lynx rufus</i>			1							
<i>Cervus canadensis</i>		2	5	1		1	7		5	
<i>Odocoileus virginianus</i>	48	62	55	52	41	71	73	7	65	7

Table 3: Bone Refuse,  
Fairport Harbor and Reeve Sites

Mammals:	FH	R	Birds:	FH	R
<i>Blarina brevicauda</i>	1		<i>Branta canadensis</i>	2	2
<i>Scalopus</i> sp.	3		<i>Aythya valisineria</i>	1	
<i>Erethizon dorsatum</i>	22	62	<i>Aythya marila</i>	2	
<i>Sylvilagus floridanus</i>	12	11	<i>Lophodytes cucullatus</i>	2	
<i>Tamias striatus</i>	15	24	<i>Meleagris gallopavo</i>	41	36
<i>Sciurus carolinensis</i>	4	30			
<i>Sciurus</i> spp.	290				
<i>Castor canadensis</i>	165	121	Fishes:		
<i>Marmota monax</i>	101	28	<i>Lepisosteus</i> sp.	6	
<i>Peromyscus</i> sp.	1		<i>Esox masquinongy</i>	6	
<i>Microtus pinetorum</i>	2		<i>Placopharynx carinatus</i>	8	4
<i>Microtus pennsylvanicus</i>	1		<i>Catostomus</i> spp.	63	18
<i>Canis</i> sp.	22	23	<i>Ictalurus</i> spp.	362	82
<i>Canidae</i> spp.	18		<i>Lepibema chrysops</i>	19	
<i>Urocyon cinereoargenteus</i>	8	31	<i>Stizostedion</i> sp.	54	15
<i>Ursus americanus</i>	203	109	<i>Perca flavescens</i>	105	36
<i>Procyon lotor</i>	597	222	<i>Aplodinotus grunniens</i>	94	49
<i>Mustela vison</i>	3				
<i>Mephitis mephitis</i>	10				
<i>Lutra canadensis</i>	3				
<i>Lynx rufus</i>	8	90			
<i>Cervus canadensis</i>	218	408			
<i>Odocoileus virginianus</i>	1534	1604			
<i>Sus</i> sp.	3				
<i>Ondatra zibethica</i>		40			

Table 4:  
Bone Refuse, South Park

	Surface	1	2	3	4	5	7	9	10	11	13	14	Total
<i>Didelphis marsupialis</i>	1												1
<i>Lynx rufus</i>							4						4
<i>Mephitis mephitis</i>		1			3								4
<i>Mustela vison</i>					1								1
<i>Canis familiaris</i>	6				1	3		11					21
<i>Canis lupus</i>	2												2
<i>Canis</i> sp.	2			2									4
<i>Urocyon cinereoargenteus</i>	9		3										12
<i>Procyon lotor</i>	20	8	3	4	7	8		1					51
<i>Ursus americanus</i>	12	5	5	3		1		5	2				31
<i>Odocoileus virginianus</i>	489	248	78	23	88	54	45	49	11	24		5	1114
<i>Cervus canadensis</i>	14	5	9	5	1	1		1		2			38
<i>Sciurus</i> spp.	3	3	6				2	3	1		4	1	23
<i>Tamias striatus</i>	9	2	1	2			1				2		17
<i>Marmota monax</i>	4			1	1	1		2		1	1		11
<i>Castor canadensis</i>	12	5	1		5	1	3	2		1	3	2	35
<i>Erethizon dorsatum</i>	2	1		2	4								9
<i>Sylvilagus floridanus</i>	1				2								3
Unidentified mammal	895	868	233	102	540	294	289	321	29	102	160	12	2950
<i>Meleagris gallopavo</i>	20	—	18		2	5	10	4		1		4	63
<i>Branta canadensis</i>	1												1
Unidentified bird	331	—	176	25	48	20	75	33	1	6	7	23	745
<i>Catostomus</i> sp.	5	4	1				2			1	1	1	14
<i>Ictalurus</i> sp.	12						1	2					15
<i>Stizostedion vitreum</i>	2												2
<i>Moxostoma</i> sp.	1												1
<i>Lepisosteus osseus</i>		2											2
<i>Perca flavescens</i>	4	2				1					2		9
<i>Aplodinotus grunniens</i>	4	1	1	1	1								8
Unidentified fish	121	157	26	2									206